DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-012409 Address: 333 Burma Road **Date Inspected:** 03-Mar-2010

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower

Summary of Items Observed: CWI Inspector: Mr. Du Zhi Qun

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Bays 1 through 9

This QA Inspector observed no ZPMC personnel were working on Caltrans OBG segments or tower assemblies in OBG Bays 1 through 9.

Tower Bay 10

This QA Inspector observed ZPMC welder stencil 066163 is using flux cored welding procedure WPS-345-FCAW 2G(2F)-Repair to add weld material and extend the length of East tower shear plate ED1-27A in accordance with weld repair document TWR3074. This QA Inspector observed a welding current of approximately 300 amps and 31 volts. This QA Inspector observed ZPMC has one person with torch is maintaining the base material temperature and ZPMC QC personnel are monitoring the interpass temperature to ensure the base material is an acceptable temperature. Items observed on this date appeared to generally comply with applicable contract documents.

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This QA Inspector observed ZPMC welder Mr. Liu Xie stencil 066236 is using flux cored welding procedure WPS-345-FCAW 2G(2F)-Repair to add weld material and extend the length of East tower shear plate ED1-27A in accordance with weld repair document TWR3074. This QA Inspector observed a welding current of approximately 300 amps and 31.2 volts. This QA Inspector observed ZPMC has one person with torch is maintaining the base material temperature and ZPMC QC personnel are monitoring the interpass temperature to ensure the base material is an acceptable temperature. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder stencil 070217 is using flux cored welding procedure WPS-345-FCAW 2G(2F)-Repair to add weld material and extend the length of East tower shear plate ED1-27A in accordance with weld repair document TWR3074. This QA Inspector observed a welding current of approximately 340 amps and 29.5 volts. This QA Inspector observed ZPMC has one person with torch is maintaining the base material temperature and ZPMC QC personnel are monitoring the interpass temperature to ensure the base material is an acceptable temperature. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder stencil 070478 is using flux cored welding procedure WPS-345-FCAW 2G(2F)-Repair to add weld material and extend the length of East tower shear plate ED1-27A in accordance with weld repair document TWR3074. This QA Inspector observed a welding current of approximately 300 amps and 31.5 volts. This QA Inspector observed ZPMC has one person with torch is maintaining the base material temperature and ZPMC QC personnel are monitoring the interpass temperature to ensure the base material is an acceptable temperature. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wu Cun Xiung, stencil 070101 is using flux cored welding procedure WPS-345-FCAW 3G(3F)-Repair to add weld material and extend the length of north tower skirt plate NSD1-A183 in accordance with weld repair document TWR3075. This QA Inspector observed a welding current of approximately 165 amps and 24.5 volts. This QA Inspector observed ZPMC has one person with torch is maintaining the base material temperature and ZPMC QC personnel are monitoring the interpass temperature to ensure the base material is an acceptable temperature. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Jiu Jing Yong, stencil 067500 is using flux cored welding procedure WPS-345-FCAW 3G(3F)-Repair to add weld material to the end of north tower skirt plate NSD1-A183 in accordance with weld repair document TWR3075. This QA Inspector observed a welding current of approximately 165 amps and 24.0 volts. This QA Inspector observed ZPMC has one person with torch is maintaining the base material temperature and ZPMC QC personnel are monitoring the interpass temperature to ensure the base material is an acceptable temperature. Items observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

See Above.

Comments

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer